What is claimed is:

1. A side-emitting illumination device for uniformly distributing light comprising:

an LED light source,

a light-transmitting rod which permits total internal reflection, and

outcoupling material affixed to an outer surface of the rod.

2. The side-emitting illumination device of claim 1, wherein the light source further comprises a plurality of LEDs.

3. The side-emitting illumination device of claim 2, wherein the plurality of LEDs includes at least a red, a green, and a blue LED which, when mixed, generate white light.

4. The side-emitting illumination device of claim 3, wherein the array of red, green, and blue LEDs can be mixed to generate a variety of white light chromaticity.

5. The side-emitting illumination device of claim 2, wherein the array of red, green, and blue LEDs can be mixed to generate dynamic color effects.

6. The side-emitting illumination device of claim 2, wherein the rod is a flexible rod.

7. The side-emitting illumination device of claim 2, wherein the rod is a rigid rod.

8. The side-emitting illumination device of claim 2, wherein the outcoupling material is paint.

9. The side-emitting illumination device of claim 8, wherein the paint is white paint.

10. The side-emitting illumination device of claim 9, wherein the white paint is distributed in such a way as to control the angular distribution of light leaving the rod.

11. The side-emitting illumination device of claim 9, wherein the white paint is distributed in such a way as to ensure uniform light distribution along the length of the rod.

12. The side-emitting illumination device of claim 2, wherein the rod is an elliptical rod in cross-section.

13. The side-emitting illumination device of claim 2, wherein the rod is a square rod in cross-section.

14. The side-emitting illumination device of claim 2, wherein the rod is a combination of straight and curved edges in cross-section.

15. The side-emitting illumination device of claim 14, wherein the combination of straight and curved edges vary in configuration along the length of the rod.

16. The side-emitting illumination device of claim 2, wherein the outcoupling material comprises a combination of white paint and fine dots with varying packing density.

17. The side-emitting illumination device of claim 2, wherein the luminary further comprises a mirror at an end of the rod away from the light source.

18. The side-emitting illumination device of claim 17, wherein the mirror reflects light that travels the entire length of the rod.

add B3)